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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,128	03/25/2004	Andrej Astachow	071308.0542	7682

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BAKER BOTTS, LLP  
910 LOUISIANA  
HOUSTON, TX 77002-4995

EXAMINER

GORMAN, DARREN W

ART UNIT PAPER NUMBER

3752

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/809,128

Applicant(s)

ASTACHOW ET AL.

Examiner

Darren W. Gorman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03/25/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The IDS filed on March 25, 2004 is hereby acknowledged and has been placed of record.

Please find attached a signed and initialed copy of the PTO 1449.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 13, the recitation "the valve needle guide" does not have clear antecedent basis.

Claim 13 will be examined as best understood by the Examiner.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-11 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanesaka et al., USPN 4,674,688.

Kanesaka et al. shows a fuel injection valve (see Figure 3) of a high-pressure accumulator injection system, the injection valve comprising: a valve body (2, 3) having a valve body seat (32) and a valve needle (28) having a valve needle seat (31) and a valve needle guide portion (29) guided over a guide length (L) in the valve body within a stationary circular guiding surface for controlling a spray orifice (33), wherein the valve body includes a reservoir (no reference number) in the shape of an annular groove, the reservoir arranged coaxially to the guiding surface, wherein the reservoir is separated from the guiding surface of the valve body by a cylinder-shaped wall section (no reference number), wherein the reservoir has a depth (T) of what appears to be at least one fifth of the guide length (L) up to about one half of the guide length (L) (see Figure 3), wherein the reservoir has a thickness ( $D_N$ ) of what appears to be at least one fifth of the diameter of the guiding surface (see Figure 3), and wherein the wall section has a thickness ( $D_W$ ), and ( $D_W$ ) and ( $D_N$ ) appear to be approximately equal (see Figure 3). Further, Kanesaka et al. shows the fuel injection valve as further comprising a hydraulic connection between a fuel inlet (19) of a pressure chamber in the valve body and the reservoir (see Figure 3; and column 3, lines 31-37). Still further Kanesaka et al. shows the fuel injection valve wherein the wall section is hollow, wherein the reservoir is a high-pressure reservoir, and wherein the connection is adapted to maintain pressure in the reservoir (see again Figure 3; and column 3, lines 31-37).

With respect to the approximate dimensions recited in claims 13-16, such approximate

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dimensions are within standard ranges for these elements in a fuel injector and therefore it is inherent that such approximate dimensions are within the scope of the fuel injection valve shown by Kanesaka et al.

*Allowable Subject Matter*

6. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents to Pataki et al. and Lambert are cited as of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W. Gorman whose telephone number is 571-272-4901. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 571-272-4901. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Darren W Gorman  
Examiner  
Art Unit 3752

DWG 5/24/05  
DWG  
May 26, 2005



**David A. Scherbel**  
**Supervisory Patent Examiner**  
Group 3.00